Description of Natural Communities and Rare Plant Populations:

Two significant natural communities occur on this site, Upland Pool and Piedmont Longleaf Pine Forest. Upland pools are depressions that occur in upland habitat or ridges. Upland Pools are rare and quite variable. The water level may range from three feet deep to completely dry, depending on rainfall. The Roberdo Bog Upland Pool is surrounded by a dense shrub zone of <u>Leucothoe racemosa</u> (Fetter-bush), <u>Viburnun nudum</u> (Southern wild raisin), <u>Cyrilla racemiflora</u> (Titi), and a thick mat of <u>Smilax rotundifolia</u> (Horsebrier) and <u>Smilax laurifolia</u>. Canopy trees that occur on the outer zone include <u>Acer rubrum</u> (Red maple), <u>Quercus phellos</u> (Willow oak), <u>Nyssa sylvatica</u> (Black gum), and <u>Pinus taeda</u> (Loblolly pine). Common wetland herbs grow in areas of low shrub density, <u>Oxypolis rigidior</u>, <u>Carex crinita</u> (Fringed sedge), <u>Eleocharis tuberculosa</u>, <u>Scirpus atrovirens</u>, Dulichium arundinaceum, and Osmunda cinnamomea (Cinnamon fern).

The Piedmont Longleaf Pine Forest is significant because few examples of high quality longleaf pine forest still occur in the piedmont. This site supports a Piedmont Longleaf Pine Forest due to management efforts by the U.S.F.S. - Uwharrie National Forest. The quality of the longleaf pine forest varies across the site. In some areas, 90% of the canopy is Pinus palustris (Long-leaf pine). In other areas, the canopy is dominated by hardwoods. The dominant canopy trees in the Piedmont Longleaf Pine Forest are Pinus palustris (Long-leaf pine), Pinus taeda (Loblolly pine), and Pinus echinata (Short-leaf pine). Canopy hardwood trees found on the site include Quercus falcata (Spanish oak), Quercus velutina (Black oak), Quercus coccinea (Scarlet oak), Quercus montana (Chestnut oak), Liriodendron tulipifera (Tuliptree), Quercus alba (White oak), and Carya glabra (Pignut hickory). The understory supports hardwood trees such as Cornus florida (Flowering dogwood), Oxydendrum arboreum (Sourwood), Acer rubrum (Red maple), Carya tomentosa (Mockernut), Sassafras albidum (Sassafras), Quercus alba (White oak), and other oaks and hickories. The shrub and herb layer is dominated with Gaylussacia frondosa var. frondosa (Dangleberry) and Pteridium aquilinum (Bracken fern). The herb layer varies in composition depending on the soil moisture. Seepage areas support species such as Osmunda cinnamomea (Cinnamon fern), Osmunda regalis var. spectabilis (Royal fern), Woodwardia areolata (Netted chainfern), and Carex spp. (Sedges).

Three rare plant species occur on the Roberdo Bog and Longleaf Pine Forest site. All three species occur within or adjacent to abandoned logging roads or fire breaks where sunlight penetrates to the forest floor. These species include Helianthus Schweinitzi (Schweinitz's sunflower), Helianthus laevigatus (Smooth sunflower), and Gnaphalium helleri var. helleri (Heller's rabbit tobacco). This site is especially significant because most known occurrences of the Helianthus species are found along road, powerlines, and railroad right-of-ways where they are threatened by mowing and herbicide spraying. Helianthus schweinitzi (Schweinitz's sunflower) is a Federally Endangered sunflower. Helianthus schweinitzi (Smooth sunflower) has a North Carolina Status of Significantly Rare. Future forestry management by the U.S.F.S. - Uwharrie National Forest may improve the habitat for these species. Gnaphalium helleri var. helleri (Heller's rabbit tobacco) has a North Carolina Status of Significantly Rare and occurs along old logging road clearings.

Description of Faunal Communities and Rare Animal Populations: